

Lab Assignment-2

2. Programming Exercises on Classes and Objects

2.1 Define a class to represent a bank account. Include the following members

Data members:

1. Name of the depositor
2. Account number
3. Type of account (savings or current)
4. Balance amount in the account

Member functions:

1. To assign initial values
2. To deposit an amount
3. To withdraw an amount after checking the balance
4. To display name and balance

Write a main function to test the program.

2.2 Modify the class and program of Problem No. 2.1 for handling of 10 customers.

2.3 Create two classes **DM** and **DB** which store the value of distances. **DM** stores distances in metres and centimetres and **DB** in feet and inches. Write a program that can read values for the class objects and add one object of **DM** with another object of **DB**.

Use a friend function to carry out the addition operation. The object that stores the results may be a **DM** object or **DB** object, depending on the units in which the results are required. The display should be in the format of feet and inches or metres and centimetres depending on the object on display.

2.4 Create a class distance with private data members km,m,cm. Include the following member functions:

input_distance() with 3 parameters to initialize the distance object.

display() to display a distance object.

add_distance() to perform addition of 2 distance objects and will return the result.

In the main function, create an array of n distance objects, initialize and display them. Perform addition of any 2 distance object by prompting the user for the index of 2 objects in the array. Display the result.